

Specifications

Output Modules

Attribute	1794-0B8EPXT	1794-0B16PXT	1794-1B10X0B6XT
Number of outputs, non-isolated, sourcing	8 (1 group of 8)	16	6
Module location	1794-TB2, 1794-TB3, 1794-TB3S, 1794-TBN	1794-TB2, 1794-TB3, 1794-TB3S	
On-state current	1.0 mA min, per channel 2.0 A max, per channel	1.0 mA min, per channel 500 mA max, per channel	2.0 A max, per channel
On-state voltage range, min	19.2 V DC	10 V DC	10 V DC
On-state voltage range, nom	24 V DC	24 V DC	24 V DC
On-state voltage range, max	31.2 V DC	31.2 V DC	31.2 V DC
Supply voltage, nom	24V DC		
Voltage range	19.2V DC...31.2V DC	10V DC...31.2V DC	10...31.2 V DC (includes 5% AC ripple)
Supply current	55 mA @ 24V DC	35 mA @ 24V DC	15 mA @ 19.2 V DC 19 mA @ 24 V DC 8 mA @ 10V DC 25 mA @ 31.2V DC
Output current rating	2.0 A, max, per output 10.0 A max, per module (for example, 8 outputs @ 1.25 A, 5 outputs @ 2.0 A, or similar combinations totaling 10.0 A or less)	8.0 A (16 outputs @ 0.5A)	2.0 A per output 10.0 A max, per module
Surge current	4.0 A for 10 ms, repeatable every 3 s	1.5 A for 50 ms, repeatable every 2 s	4.0 A for 50 ms, repeatable every 2 s
Off-state leakage, max	0.5 mA		
On-state voltage drop, max	0.2 V DC	0.5 V DC	1.0 V DC @2 A, 0.5 V DC @1A
Isolation voltage	50V (continuous), Basic Insulation Type No isolation between individual channels Type tested at 1500V AC for 60 s, between field side and system	50V (continuous), Basic Insulation Type No isolation between individual channels Type tested at 2550V DC for 60 s, between field side and system	50V (continuous), Basic Insulation Type No isolation between individual channels Type tested at 1365V AC for 60 s, between field side and system
Output signal delay, max Off to On On to Off	0.5 ms 1.0 ms		
Flexbus current	80 mA	60 mA	50 mA
Power dissipation, max	5 W @ 31.2 V DC	5.0 W @ 31.2 V DC	6.0 W @ 31.2 V DC
Thermal dissipation, max	17.1 BTU/hr @ 31.2 V DC	17.0 BTU/hr @ 31.2 V DC	20.3 BTU/hr @ 31.2 V DC
Indicators (field side indication, logic driven)	8 yellow status indicators 8 red fault indicators	16 yellow status indicators	6 yellow status indicators
Fusing	Outputs are electronically fused	Outputs are electronically protected	Module outputs are not fused. ⁽¹⁾

(1) Fusing is recommended. If fusing is desired, you must supply external fusing. Use SAN-0 M04-3A or Littelfuse 235-003 fuses.

Input Modules

Attribute	1794-1B10X0B6XT	1794-1B16XT
Number of inputs	10, nonisolated, sinking	16 (1 group of 16), nonisolated, sinking
Module location	1794-TB2, 1794-TB3, 1794-TB3S	1794-TB3, 1794-TB3S Terminal Base Unit
On-state current, min	2.0 mA	2.0 mA
On-state current, nom	8.0 mA @ 24V DC	3.0 mA @ 24V DC
On-state current, max	11.0 mA	4.0 mA
On-state voltage range, min	10 V DC	
On-state voltage range, nom	24 V DC	
On-state voltage range, max	31.2 V DC	
Supply voltage, nom	24V DC	24V DC
Voltage range	10...31.2 V DC (includes 5% AC ripple)	10V DC...31.2V DC
Supply current	15 mA @ 19.2 V DC 19 mA @ 24 V DC 8 mA @ 10V DC 25 mA @ 31.2V DC	50 mA @ 24V DC
Off-state voltage, max	5.0 V DC	
Off-state current, min	1.5 mA	
Input impedance	4.8 KΩ	
Isolation voltage	50V (continuous), Basic Insulation Type No isolation between individual channels Type tested at 1365V AC for 60 s, between field side and system	50V (continuous), Basic Insulation Type No isolation between individual channels Type tested at 850V AC for 60 s, between field side and system
Flexbus current	50 mA	30 mA

Input Modules (Continued)

Attribute	1794-IB10X0B6XT	1794-IB16XT
Power dissipation, max	6.0 W @ 31.2 V DC	2 W @ 31.2V DC
Thermal dissipation, max	20.3 BTU/hr @ 31.2 V DC	9.2 BTU/hr @ 31.2V DC
Indicators	10 yellow status indicators (Logix side indication, logic driven)	16 yellow status indicators (field side indication, logic driven)

General Specifications

Attribute	Value
Terminal base screw torque	Determined by installed terminal base
Input filter time	Refer to Input Filter Time setting tables.
Wire size	Determined by installed terminal base
Wiring Category ⁽¹⁾	2 - on signal ports
Dimensions (with module installed), (H x W x D)	94 x 94 x 69 mm 3.7 x 3.7 x 2.7 in.
Enclosure type rating	None (open-style)
Keyswitch position	2
Pilot Duty Rating	2A (1794-0B16PXT, 1794-IB10X0B6XT, 1794-0B8EPXT)
North American temp code	T4A T4 (1794-0B8EPXT, 1794-IB10X0B6XT)
IECEX temp code	T4
UKEX/ATEX temp code	T4

(1) Use this Conductor Category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Environmental Specifications

Attribute	Value
Operating temperature	IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock): -20...+70 °C (-4...+158 °F)
Temperature, surrounding air, max	70 °C (158 °F)
Storage temperature	IEC 60068-2-1 (Test Ab, Un-packaged Non-operating Cold), IEC 60068-2-2 (Test Bb, Un-packaged Non-operating Dry Heat), IEC 60068-2-14 (Test Na, Un-packaged Non-operating Thermal Shock): -40...+85 °C (-40...+185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5...95% noncondensing
Vibration	IEC60068-2-6 (Test Fc, Operating): 5 g @ 10...500 Hz
Shock, operating	IEC60068-2-27 (Test Ea, Unpackaged shock): 30 g
Shock, nonoperating	IEC60068-2-27 (Test Ea, Unpackaged shock): 50 g
Emissions	IEC 61000-6-4
ESD immunity	IEC 61000-4-2: 6 kV contact discharges 8 kV air discharges
Radiated RF immunity	IEC 61000-4-3: 10V/m with 1 kHz sine-wave 80% AM from 80...6000 MHz
EFT/B immunity	IEC 61000-4-4: ±2kV @ 5kHz on signal ports
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line(DM) and ±2 kV line-earth(CM) on signal ports
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz